

## **JACK DEMIRGIAN**

Climate Research Section  
Environmental Science Division  
Argonne National Laboratory

### **Education:**

Ph.D.           SUNY at Buffalo, Physical-Analytical Chemistry, 1976  
B.A.           Hunter College, Bronx Center, City University of NY (Now Lehman College), Chemistry, 1968

### **Professional Experience:**

1981-Present   Analytical Chemist  
                  Environmental Science Division  
                  Argonne National Laboratory

Principle investigator: projects include atmospheric radiance monitoring (global warming data), clean-up of plutonium and chlorinated hydrocarbon contaminated soils, Fourier transform infrared (FTIR) continuous emission monitor for incinerators, passive-remote detection of chemical plumes using FTIR spectrometers, detection of illegal drug laboratories, detection of explosives in soil, separation and identification of complex mixtures, advanced data analysis methods, field testing of instrumentation. Interaction with the EPA developing analytical methods and standard operating procedures. Instrumentation includes FTIR spectroscopy, ion mobility spectroscopy, gas chromatography (GC), mass spectroscopy (MS), GC/MS, PC compatible data systems and computers. Responsible for coordinating technical staff and writing reports.

### **Summary of Previous Experience:**

1976-1981      Christopher Newport College (a 4 year state college)  
1980            Associate Professor

Taught Instrumental Analysis, Instrumental Methods for Structural Determination (GC, GC/MS, MS, NMR, IR, UV, AA), Physical Chemistry, Experimental Chemistry (Physical Organic Kinetics), General, Organic, Biological, and Introductory Chemistry.

1975-1976      Visiting Assistant Professor, State University of New York at Plattsburgh

Administered General Chemistry labs and taught Instrumental Analysis and Biochemistry.

**Professional Activities:**

Advisory Committee member for the Masters in Analytical Chemistry program at IIT  
American Chemical Society (member)

**Publications:**

Author or co-author of 24+ journal, report, and conference publications and presentations.